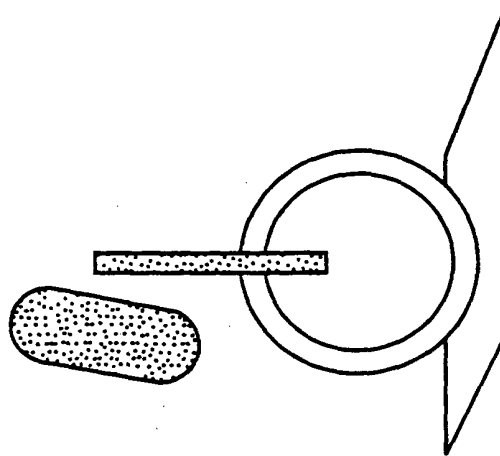
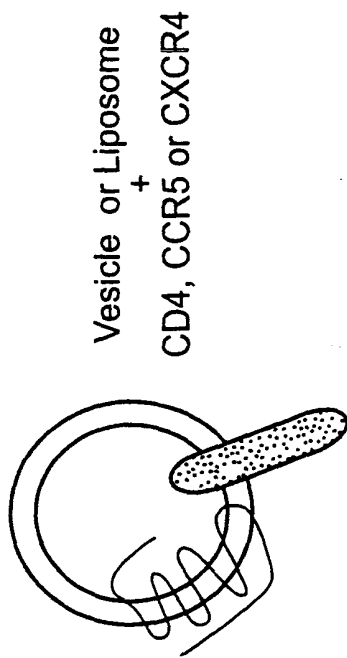


FIGURE 1



Vesicle or Liposome or Inactivated Hiv-1 Virion  
+  
Primary Isolate  
gp160

FIGURE 2

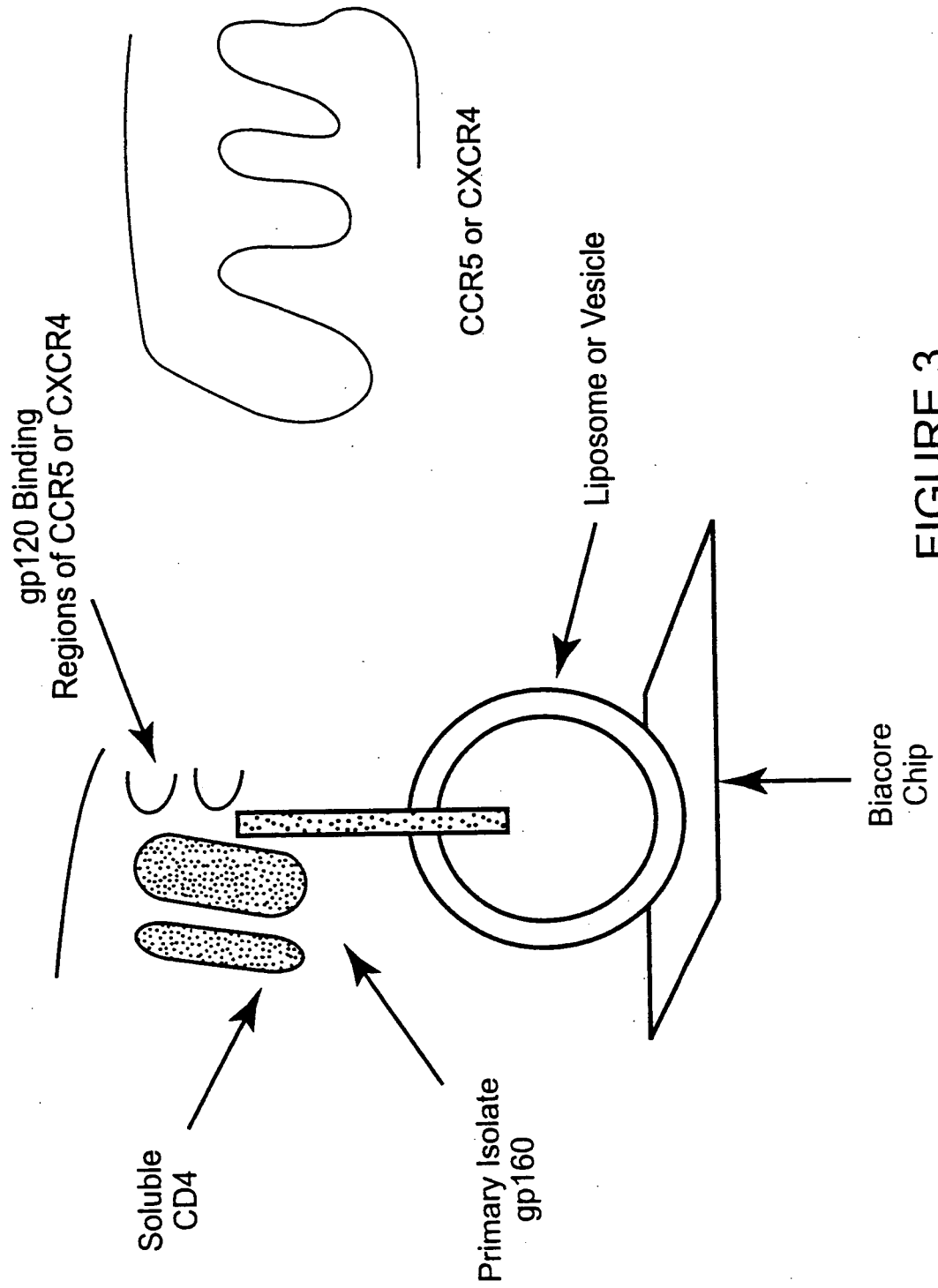


FIGURE 3

BIAcore measurements of binding interactions  
between soluble gp120 (DH12) and CD4

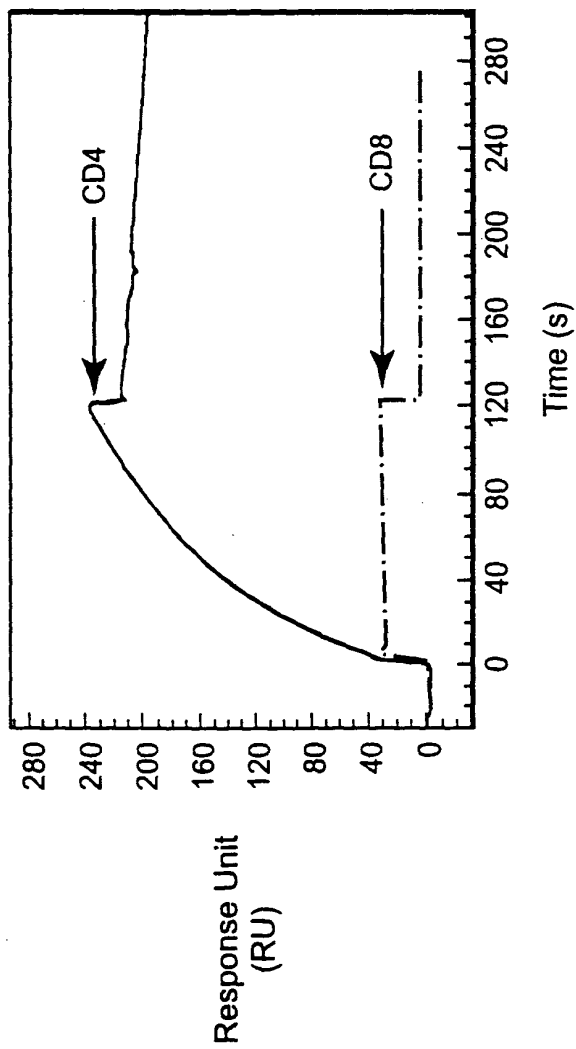


FIGURE 4

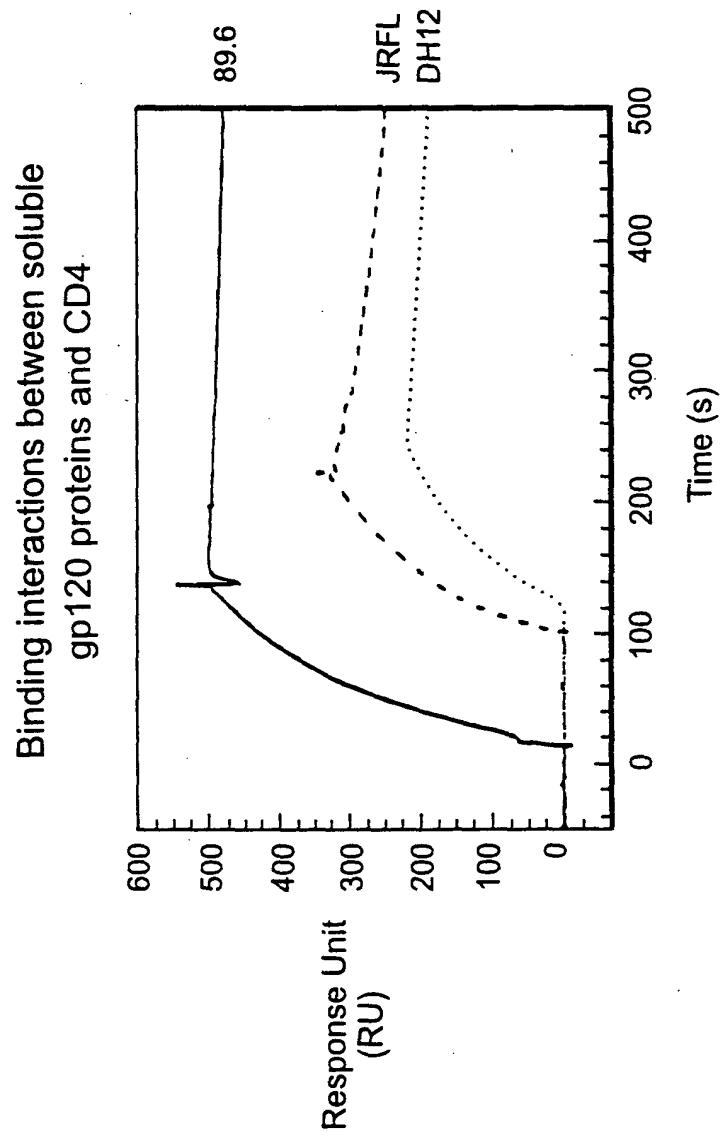


FIGURE 5

Kinetics and binding affinities of the interactions  
between gp120 and CD4

gp120	$k_a M^{-1} s^{-1}$ (on-rate)	$k_d s^{-1}$ (off-rate)	$K_d$ M	$t_{1/2}$ min
JRFL	$6.0 \times 10^3$	$8.84 \times 10^{-4}$	$1.5 \times 10^{-7}$	14
DH12	$4.9 \times 10^3$	$3.86 \times 10^{-4}$	$7.8 \times 10^{-8}$	30
89.6	$4.6 \times 10^3$	$8.48 \times 10^{-5}$	$1.8 \times 10^{-8}$	136

FIGURE 6

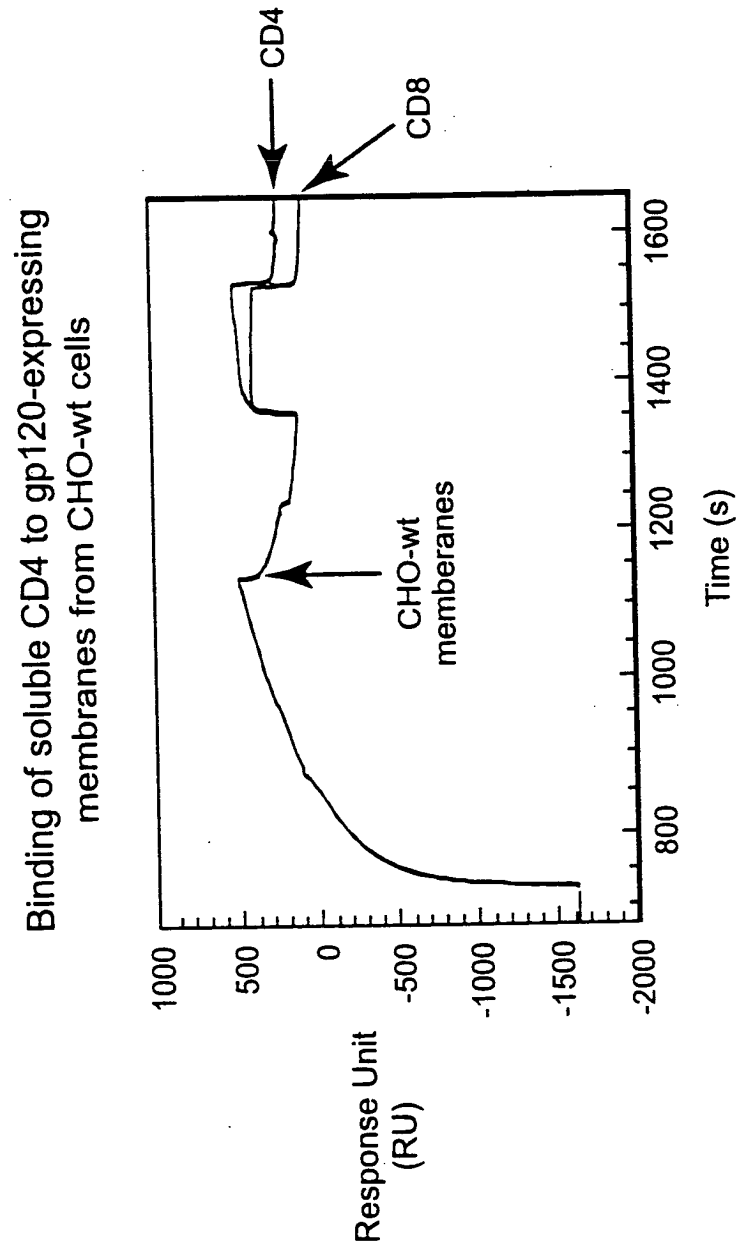


FIGURE 7

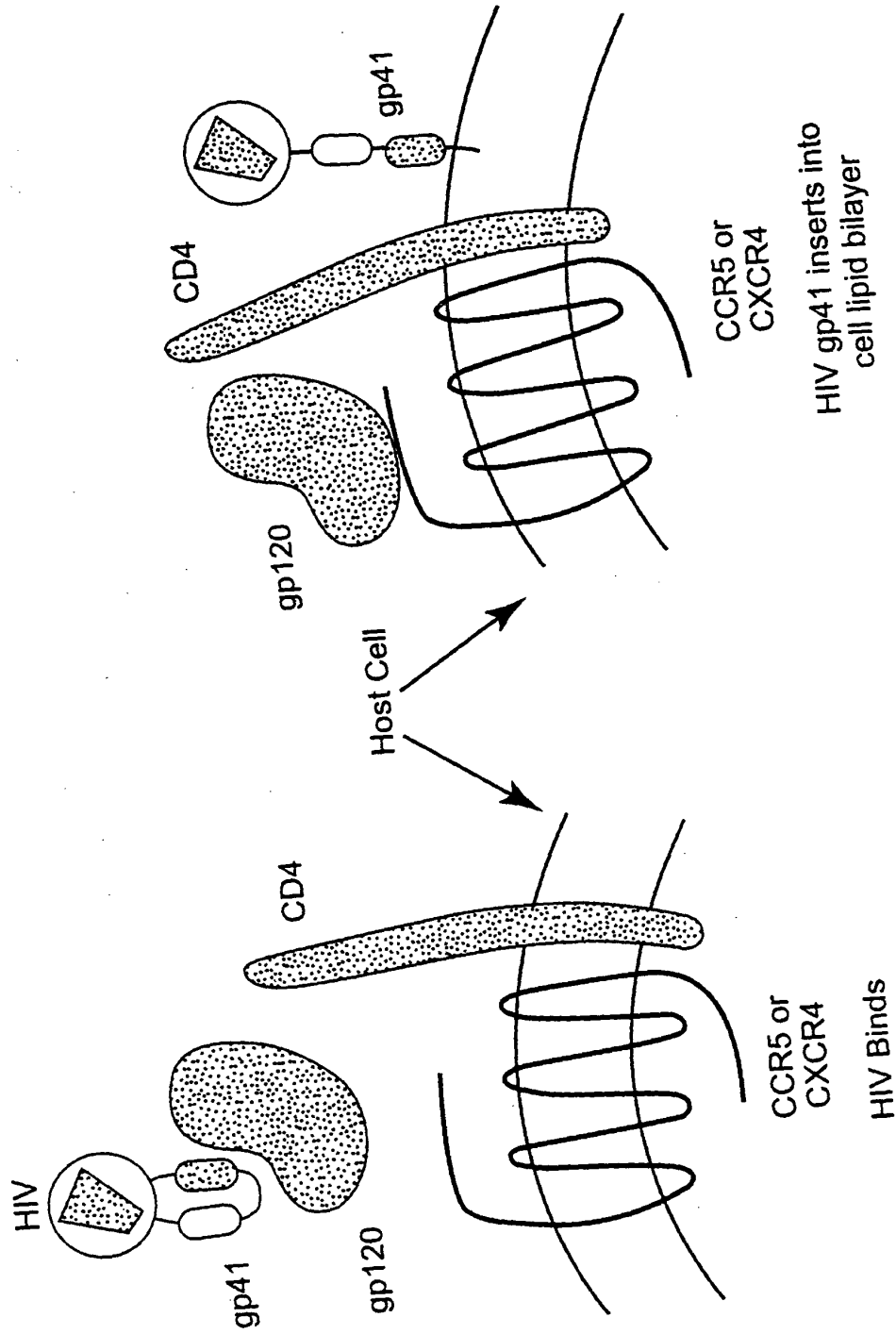
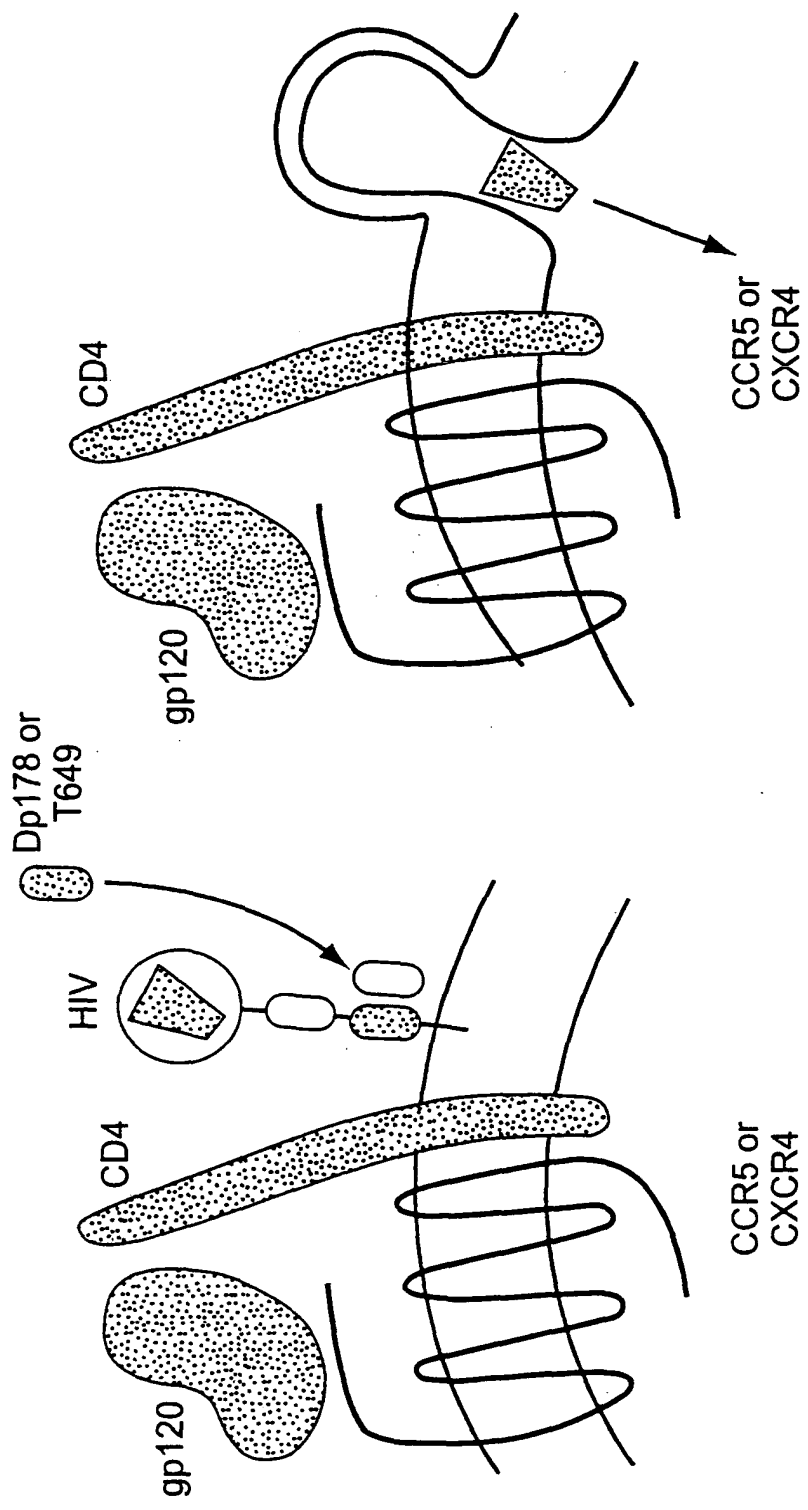


FIGURE 8





HIV fusion occurs  
in the absence of  
fusion inhibitory  
peptide

HIV fusion blocked  
by Dp178 or T649  
peptides producing  
"frozen" fusion intermediate

FIGURE 9

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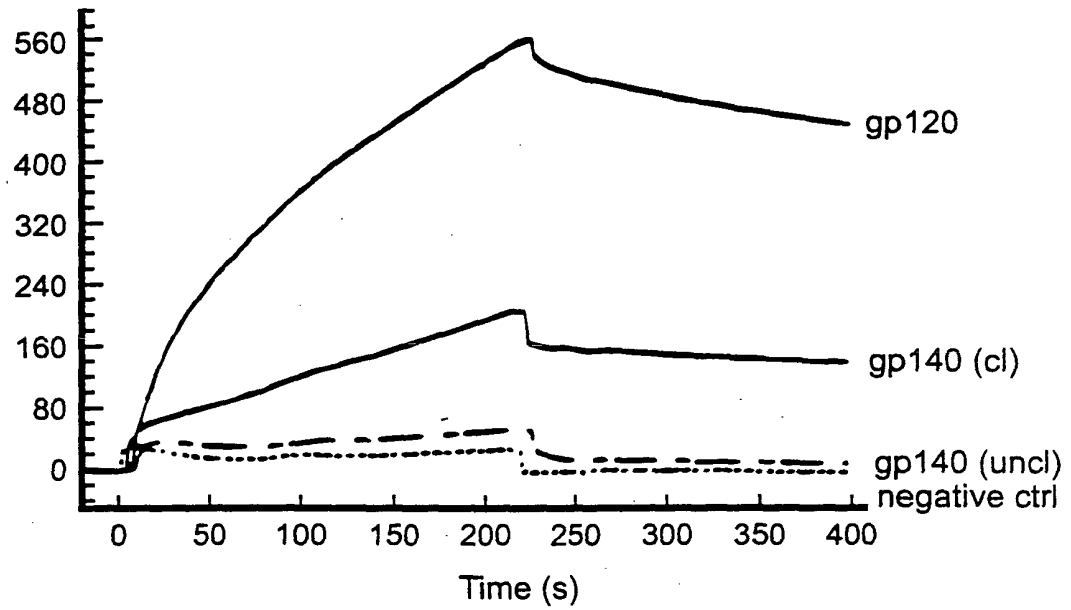


FIGURE 10A

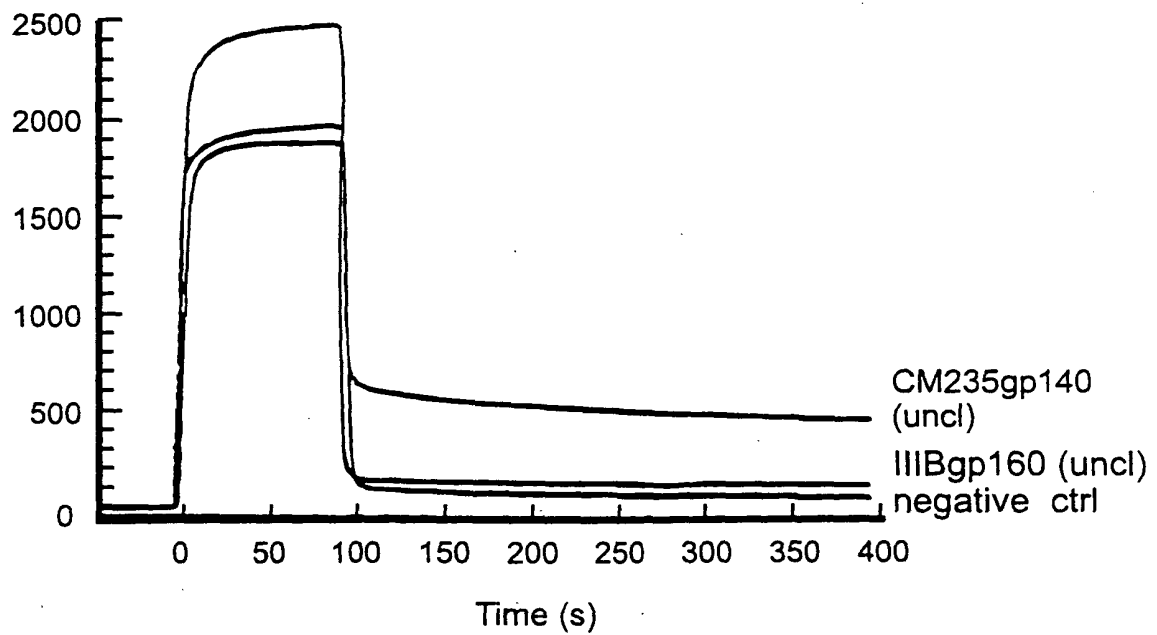


FIGURE 10B

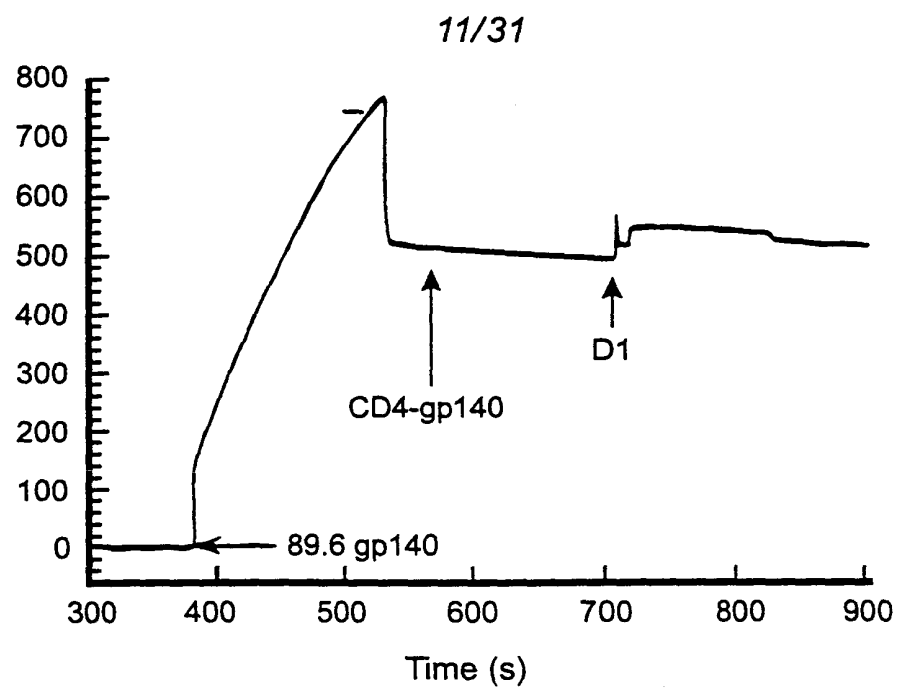


FIGURE 10C

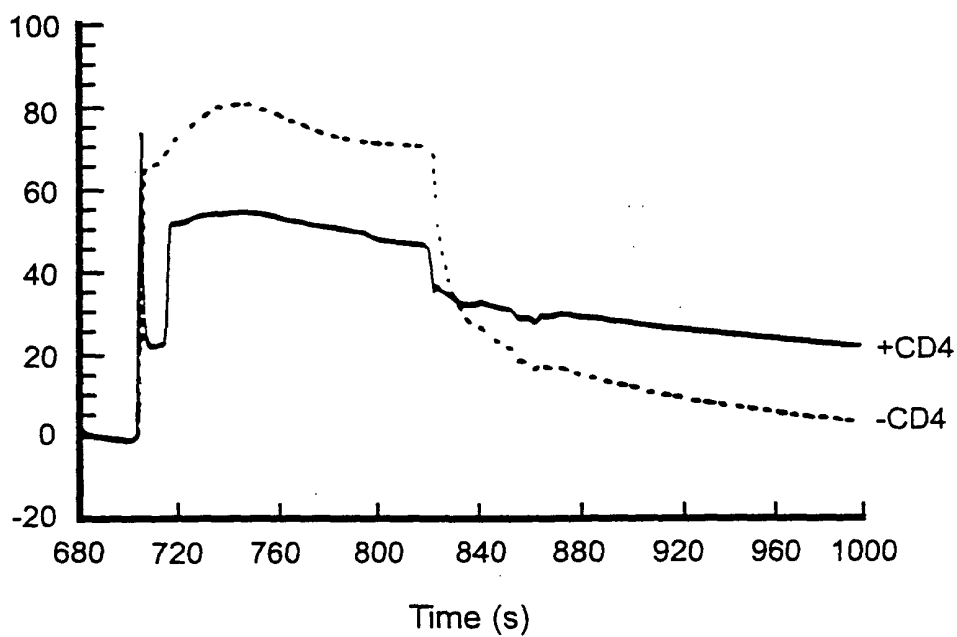


FIGURE 10D

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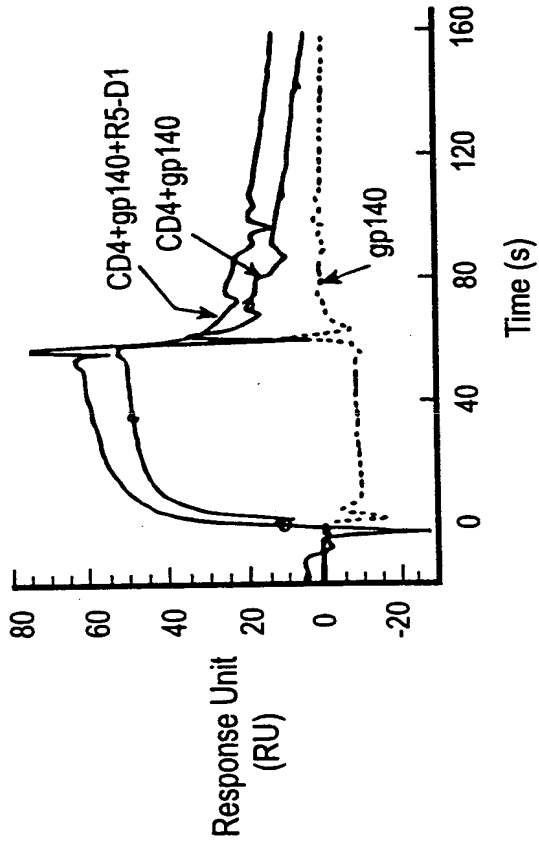


FIGURE 11A

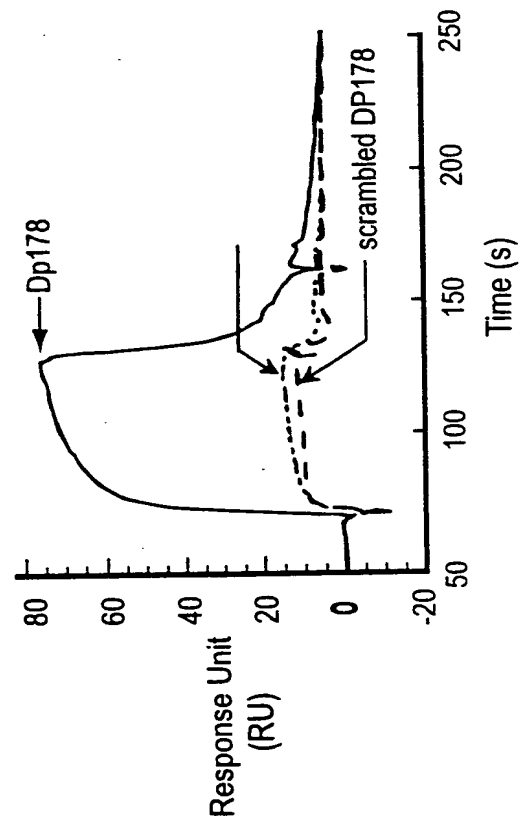


FIGURE 11C

FIGURE 11B

89.6 gp140	$K_a$ $M^{-1}s^{-1}$	$K_d$ $s^{-1}$	$K_d$ $\mu M$	$t_{1/2}$ s	$R_m$ RU
<u>DP178</u>					
CD4+gp140	$7.9 \times 10^3$	$5.6 \times 10^{-3}$	0.7	124	320
CD4+gp140+R5-D1	$3.47 \times 10^3$	$3.86 \times 10^{-3}$	1.1	180	328
gp140+R5-D1	nm	nm	nm	nm	38
gp140	nm	nm	nm	nm	35
<u>T694QL</u>					
CD4+gp140	$6.2 \times 10^3$	$1.46 \times 10^{-2}$	2.4	48	53
CD4+gp140+R5-D1	$5.1 \times 10^3$	$5.3 \times 10^{-3}$	1.0	131	64
gp140+R5-D1	nm	nm	nm	nm	0
gp140	nm	nm	nm	nm	0

FIGURE 11D

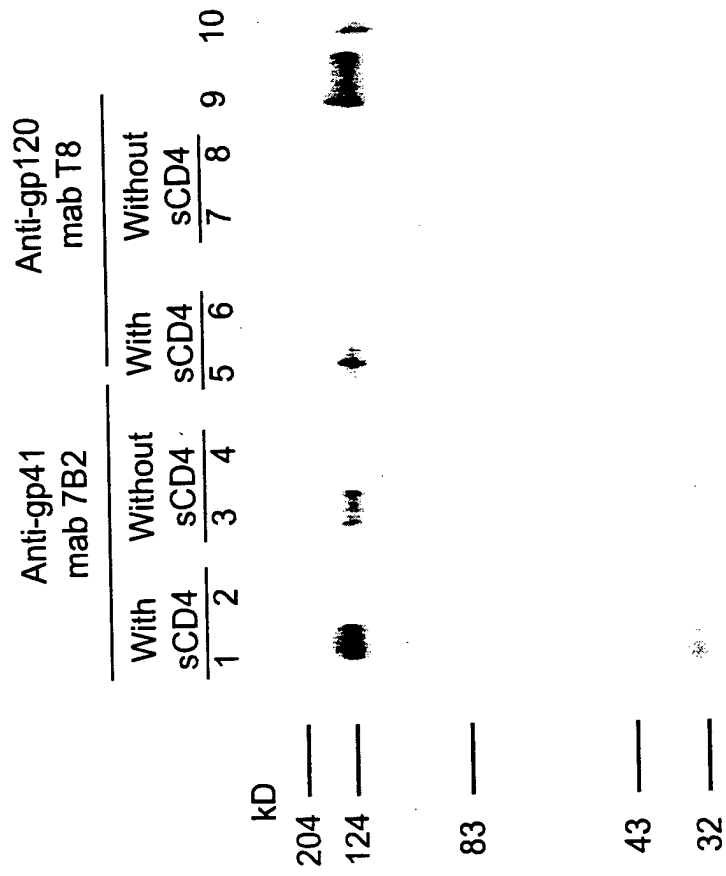


FIGURE 12

Induced Binding of HR-2 Peptides  
to Soluble HIV 89.6 gp140 Envelope

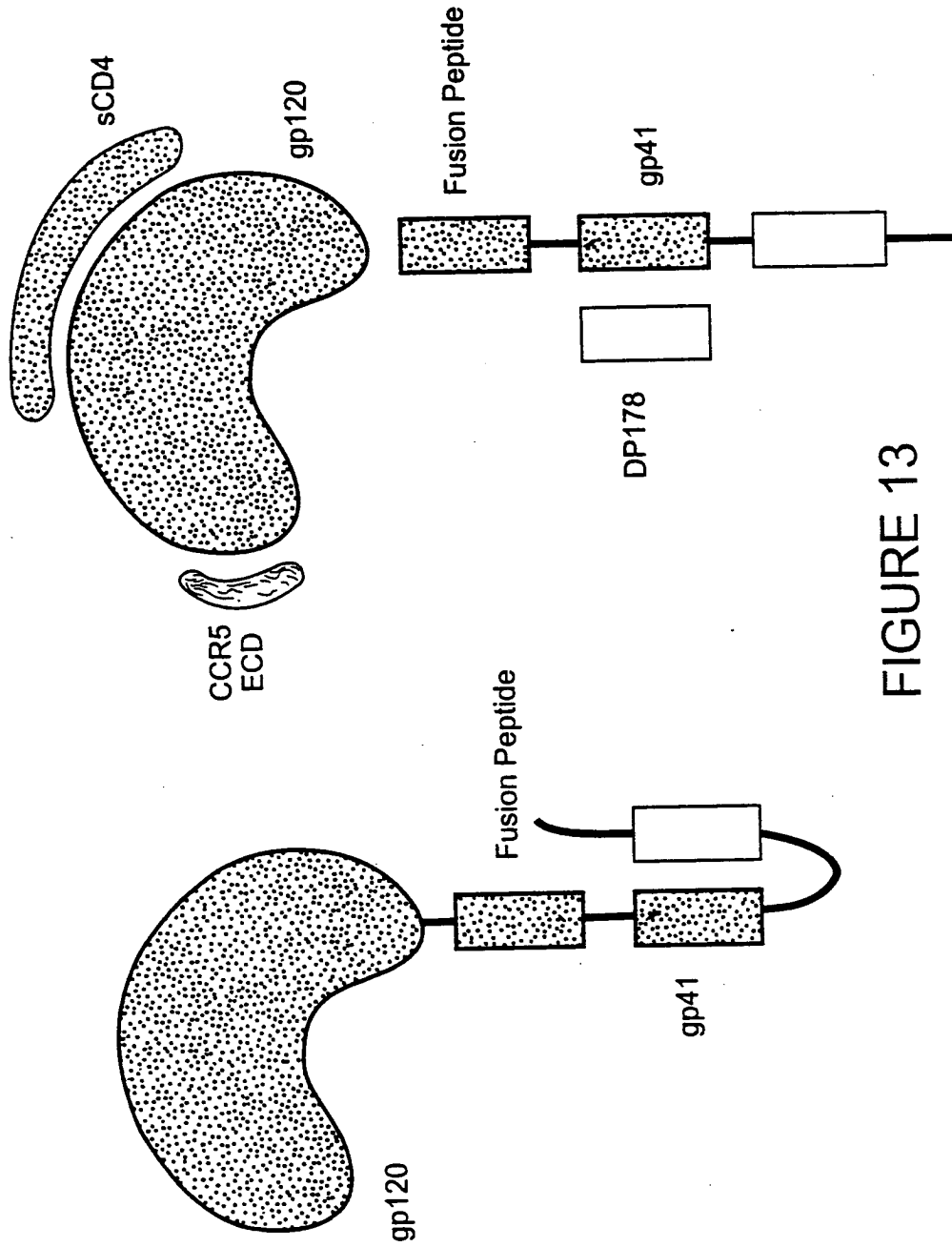


FIGURE 13

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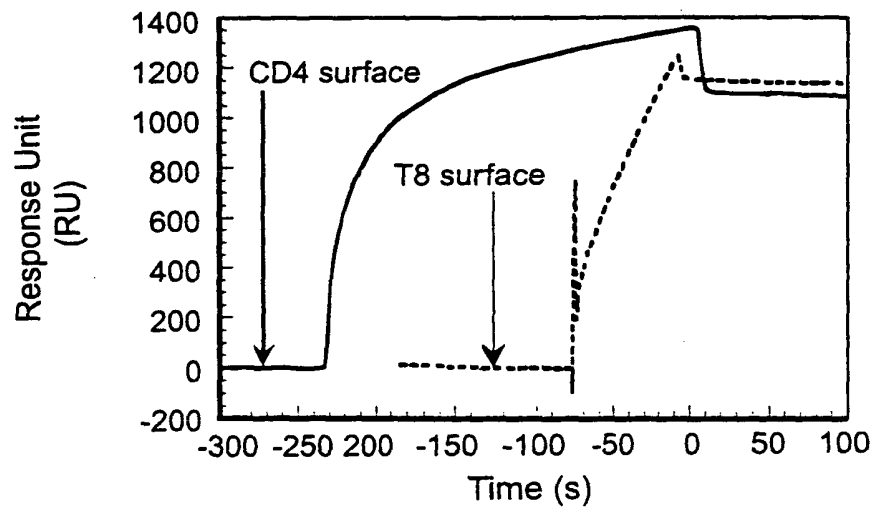


FIGURE 14A

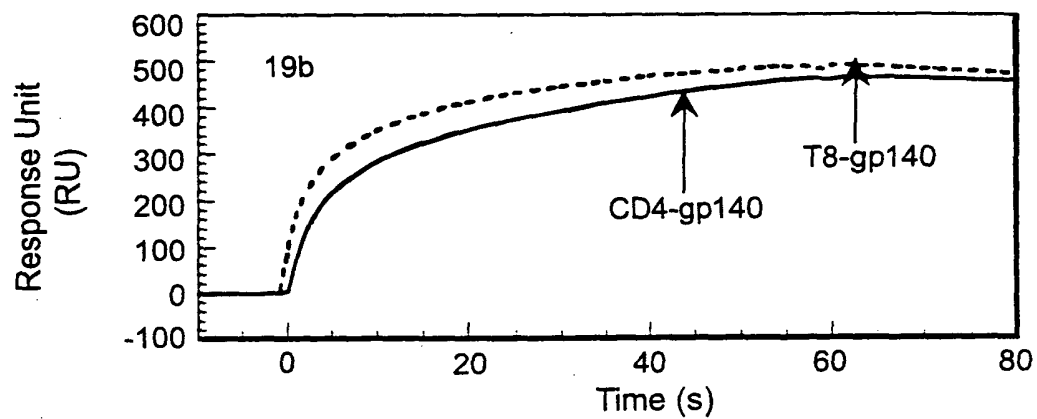


FIGURE 14B

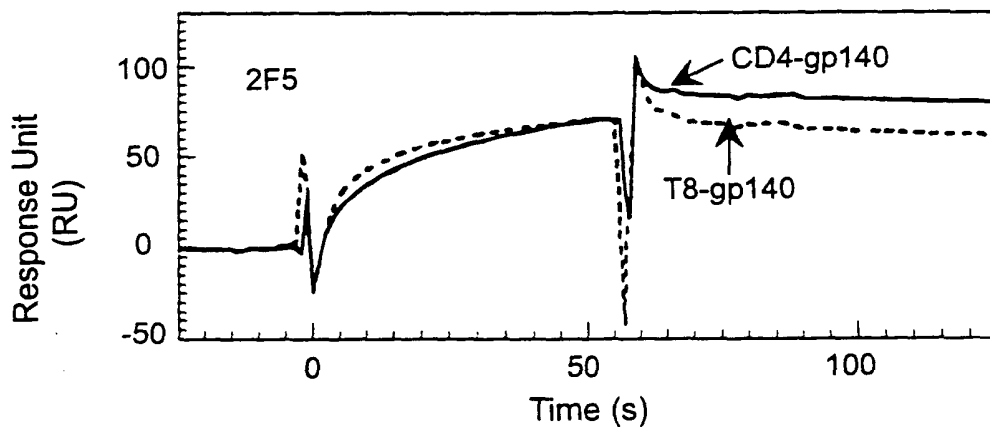


FIGURE 14C



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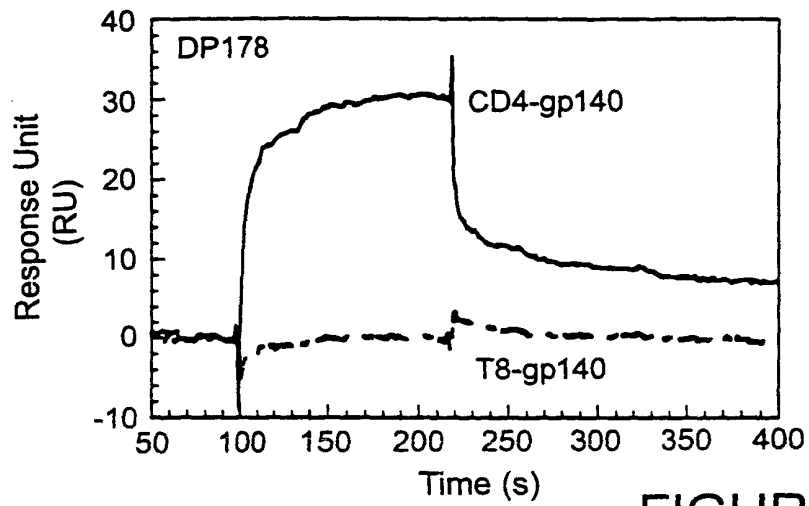


FIGURE 14D

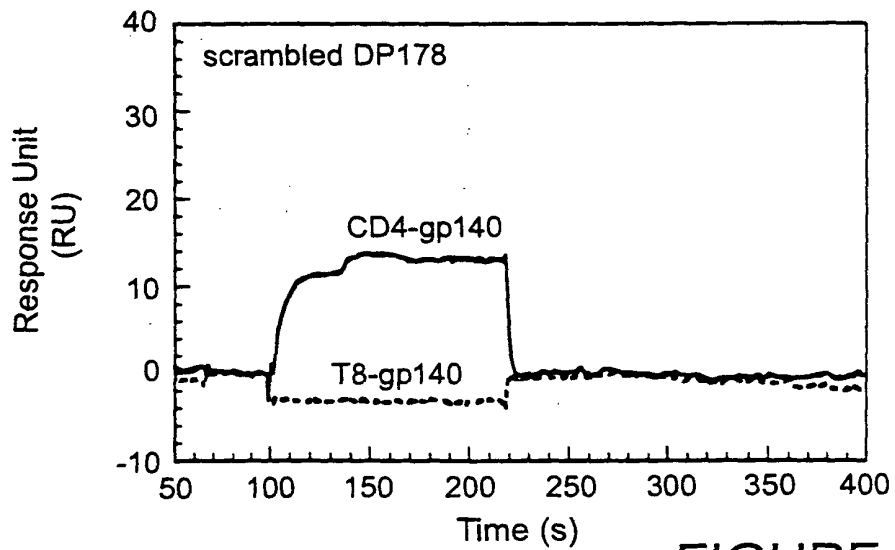


FIGURE 14E

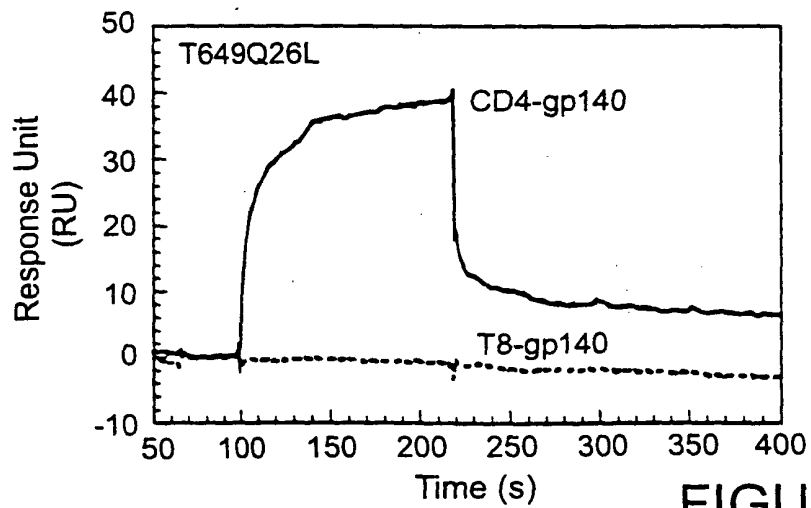


FIGURE 14F

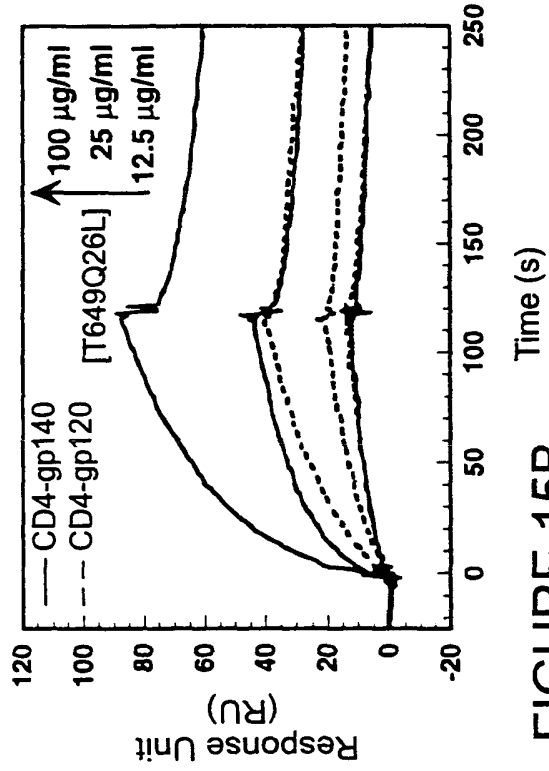


FIGURE 15A

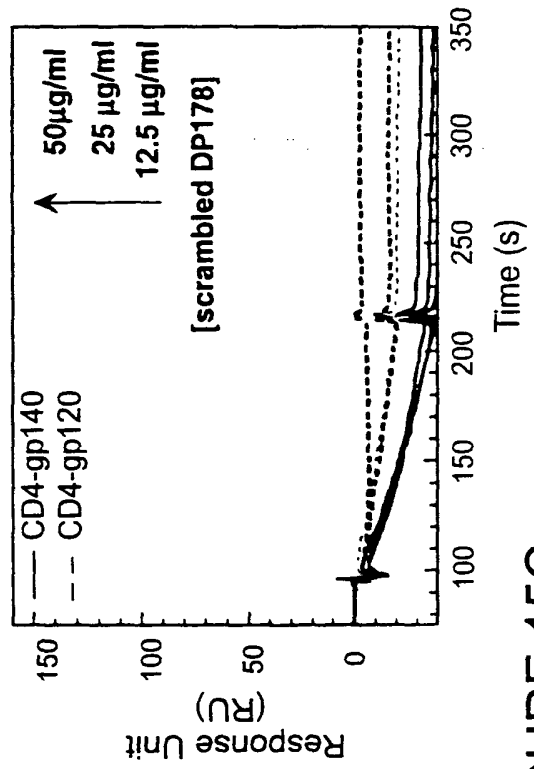


FIGURE 15B

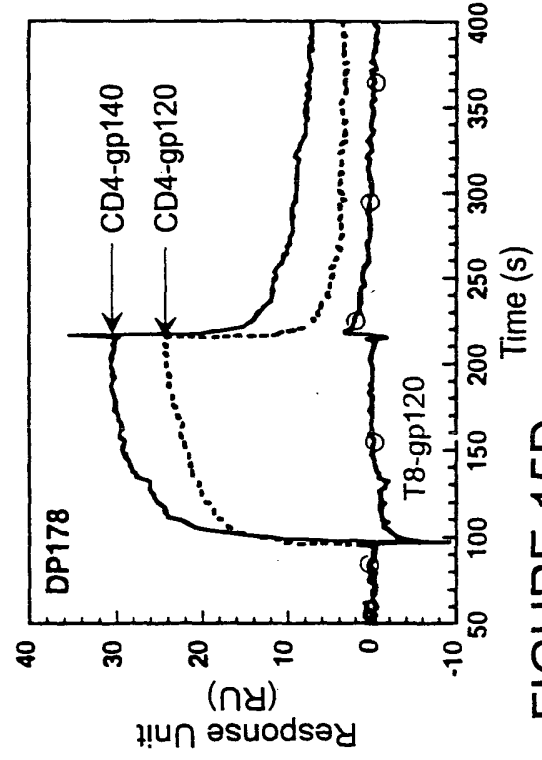


FIGURE 15C

FIGURE 15D

	$k_{on}$ $M^{-1}s^{-1}$	$k_{off}$ $s^{-1}$	$K_d$ $\mu M$	$t_{1/2}$ $s$
<u>DP178</u>				
CD4-gp120	$0.75 \times 10^3$	$1.5 \times 10^{-3}$	2.0	462
CD4-gp140	$0.93 \times 10^3$	$1.0 \times 10^{-3}$	1.1	693
<u>T649Q26L</u>				
CD4-gp120	$1.26 \times 10^3$	$3.2 \times 10^{-3}$	2.54	217
CD4-gp140	$0.88 \times 10^3$	$1.1 \times 10^{-3}$	1.20	630

FIGURE 15E

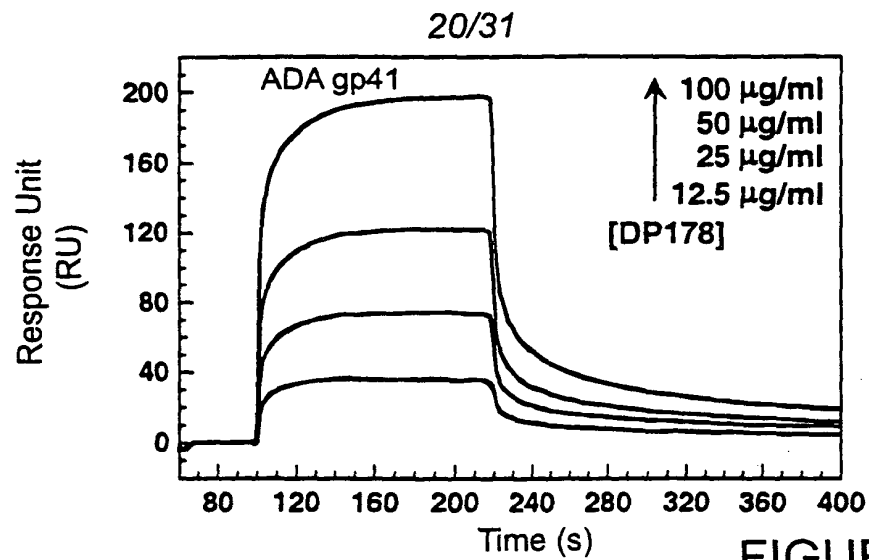


FIGURE 16A

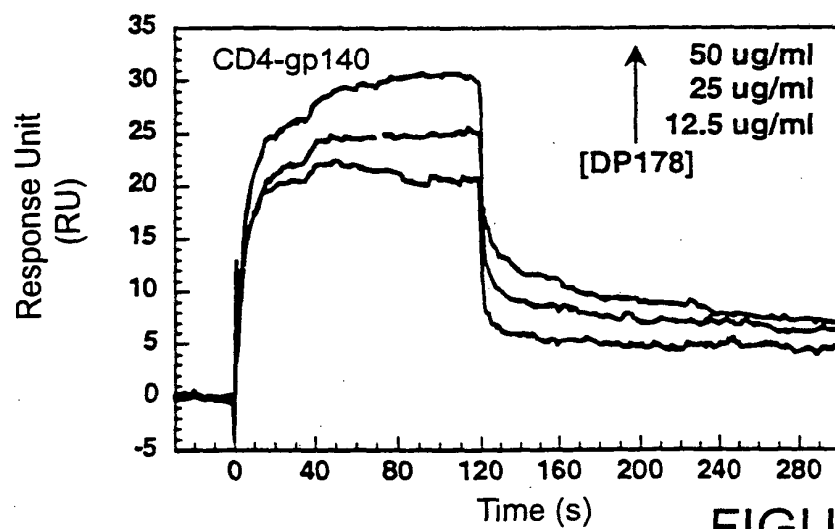


FIGURE 16B

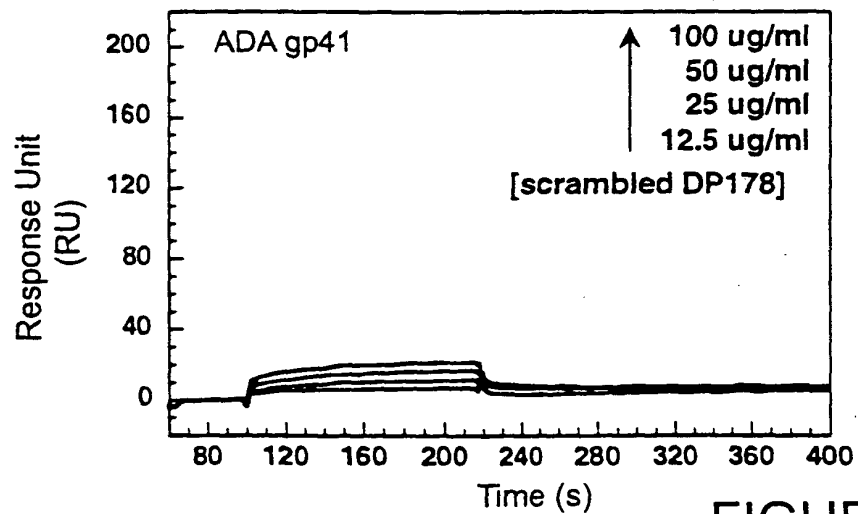


FIGURE 16C

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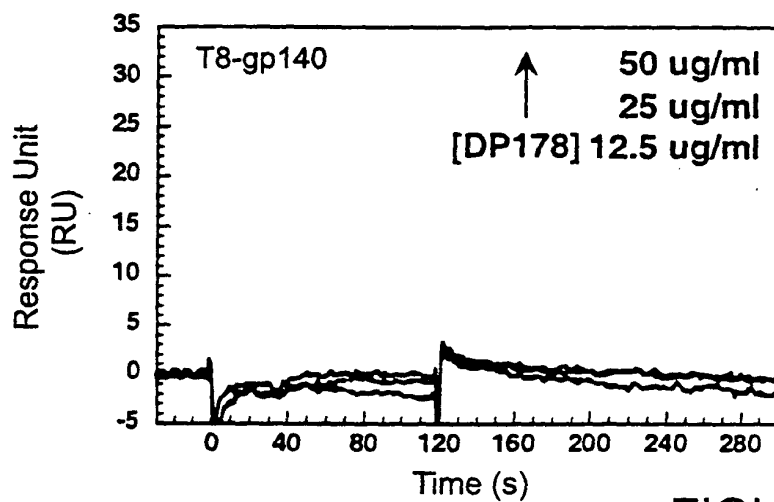


FIGURE 16D

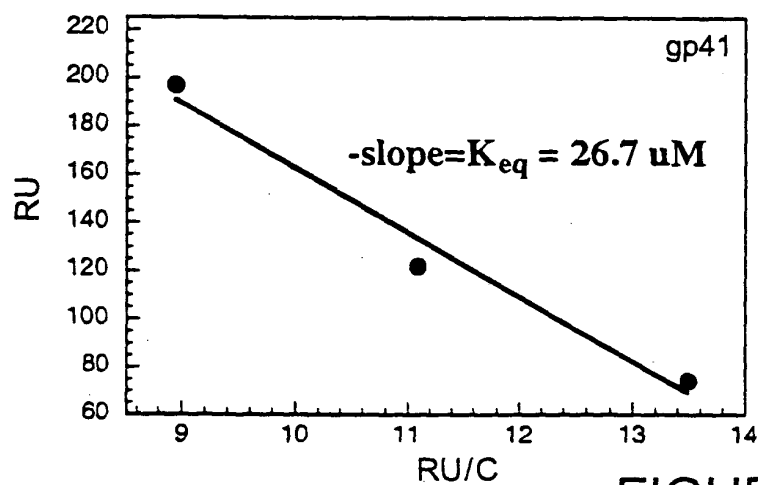


FIGURE 16E

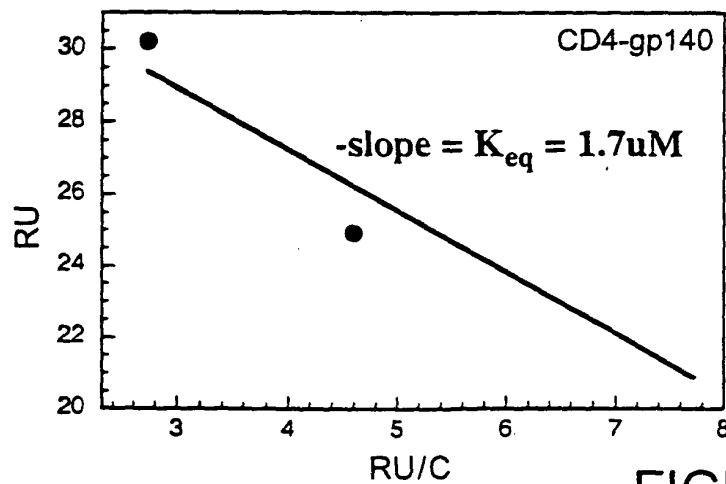


FIGURE 16F

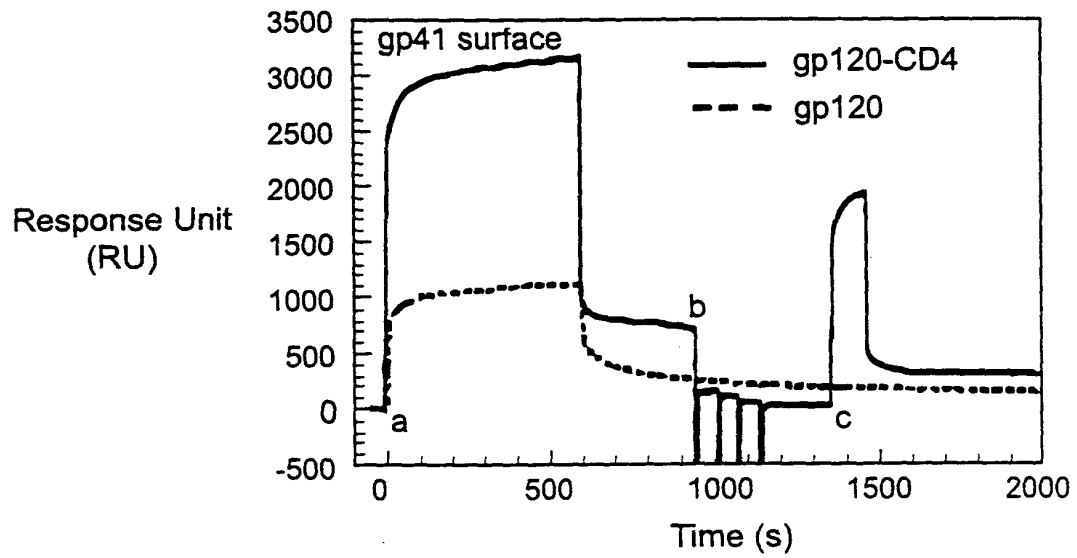


FIGURE 17A

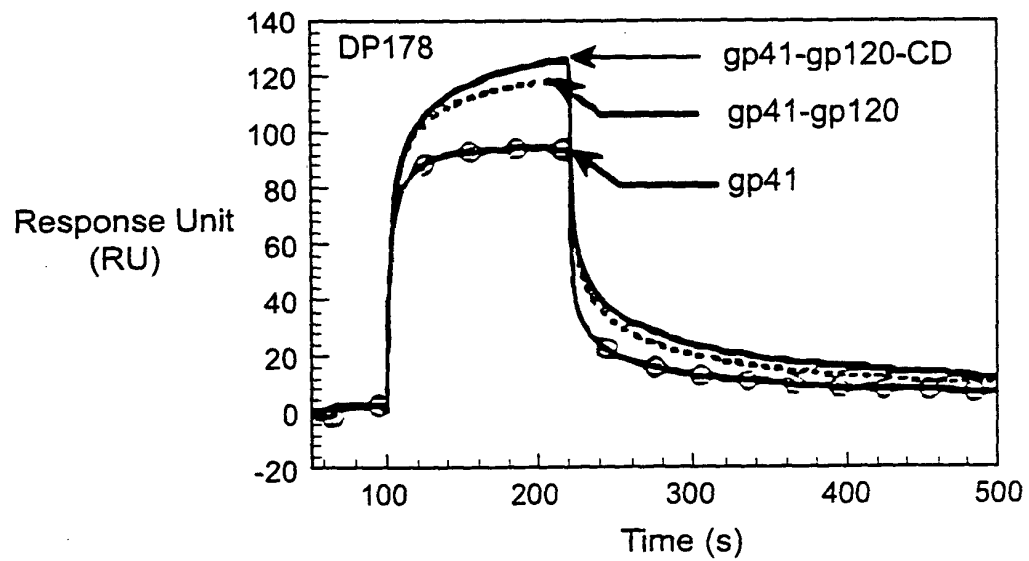


FIGURE 17B

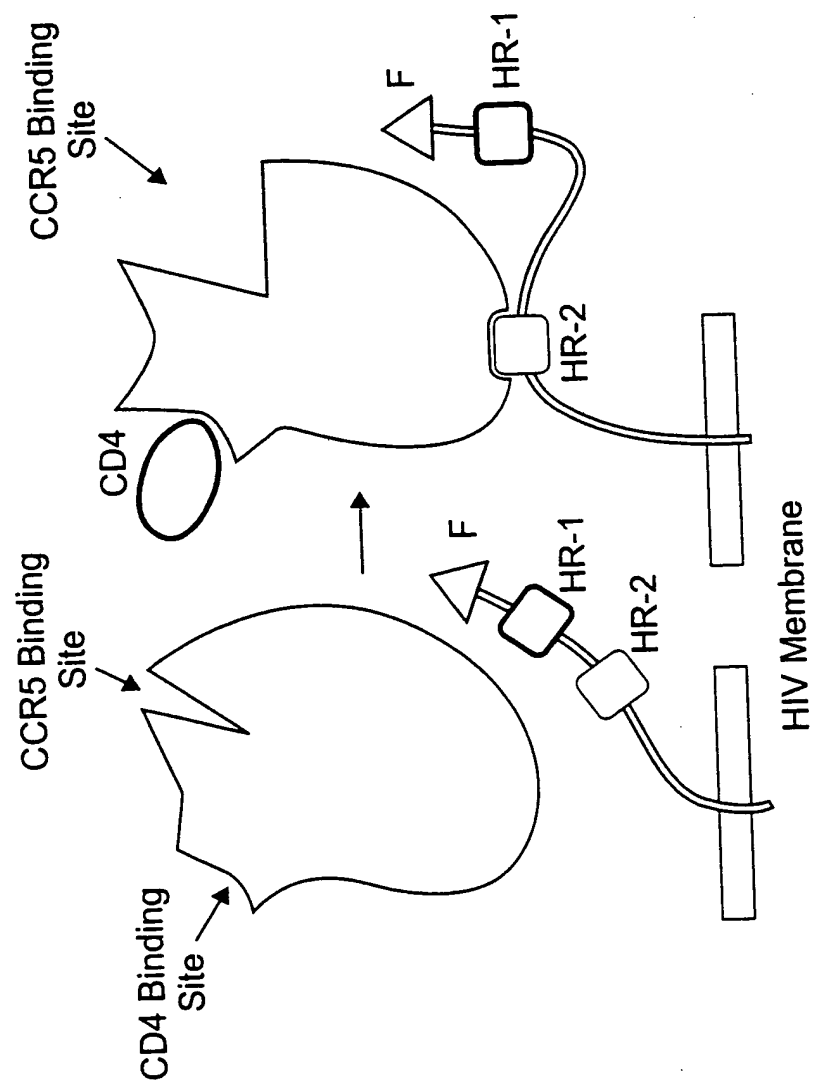


FIGURE 18

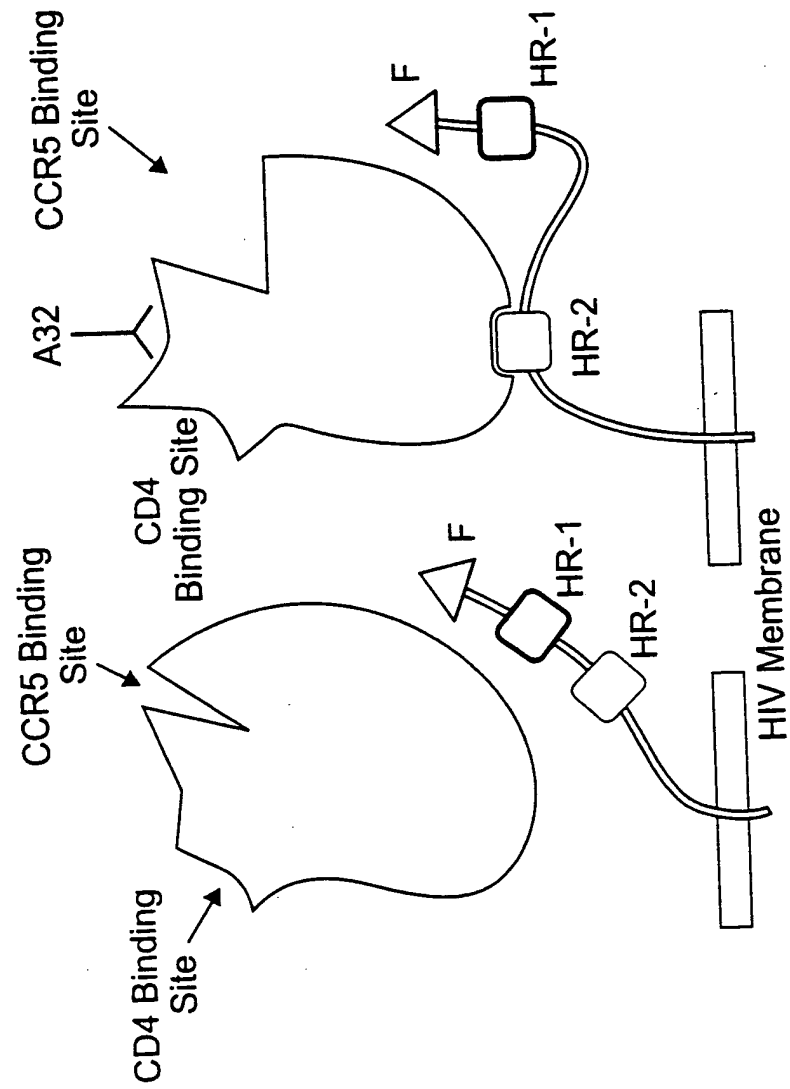


FIGURE 19



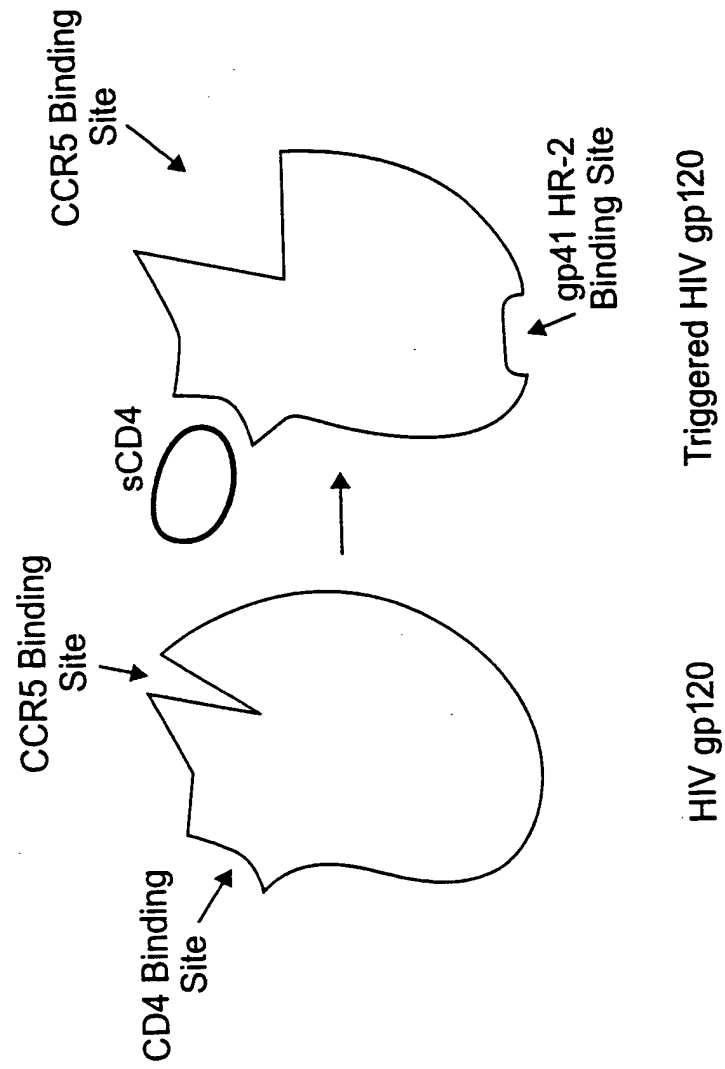


FIGURE 20

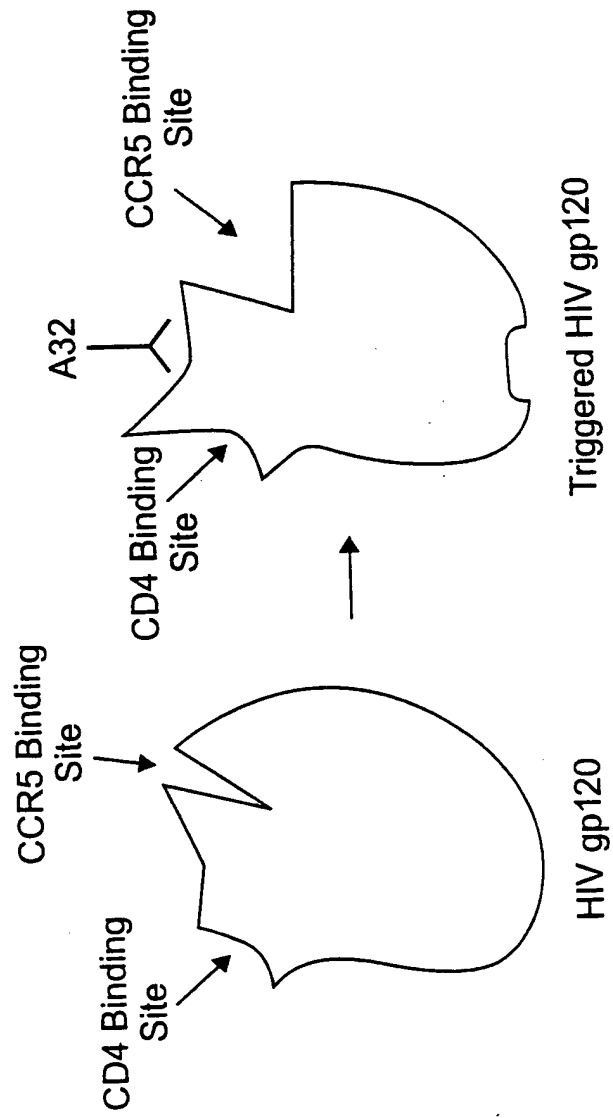


FIGURE 21

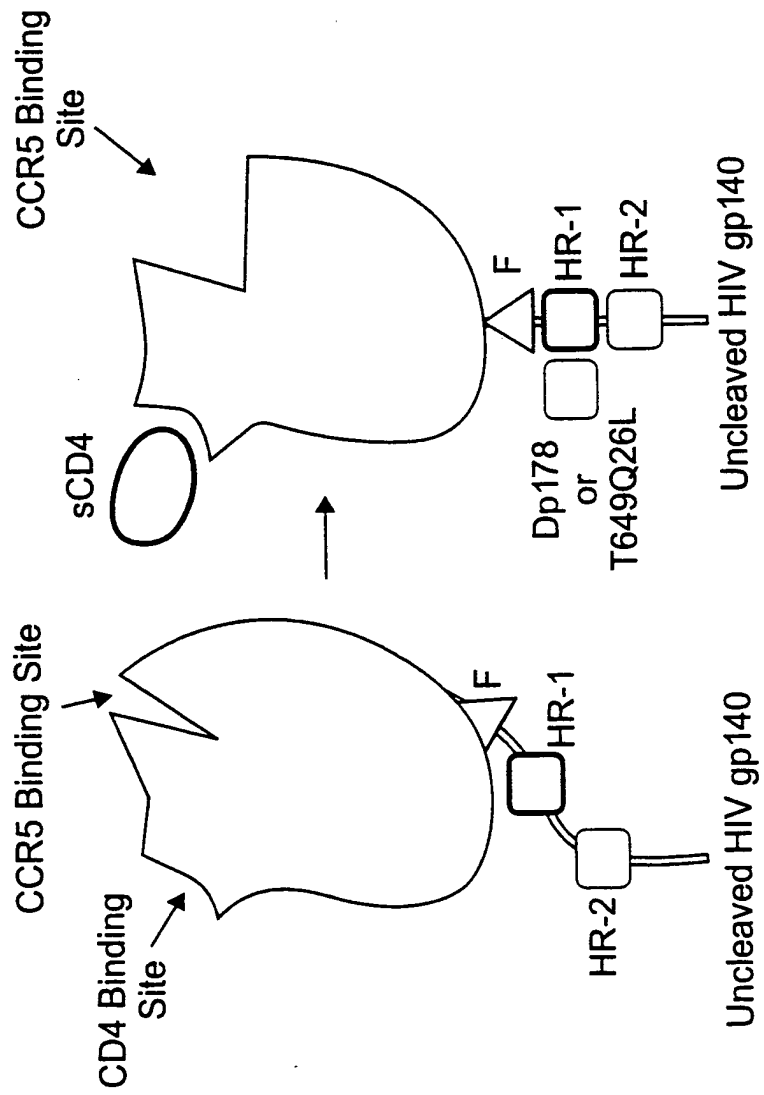


FIGURE 22

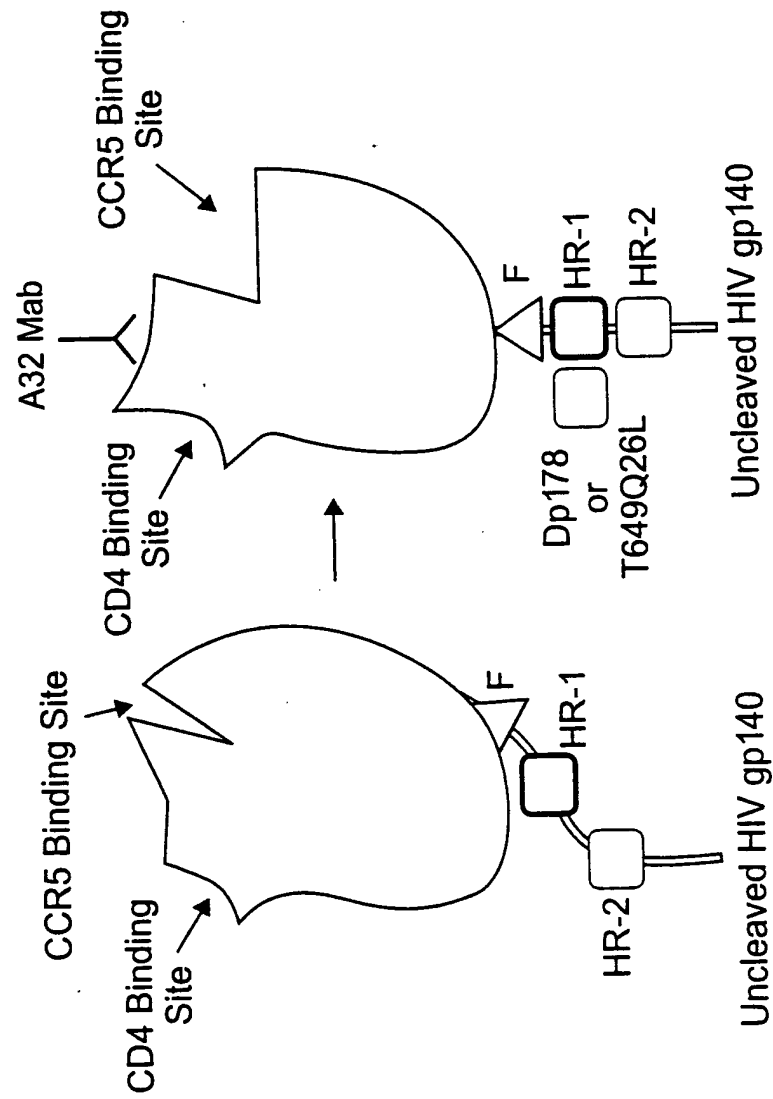


FIGURE 23



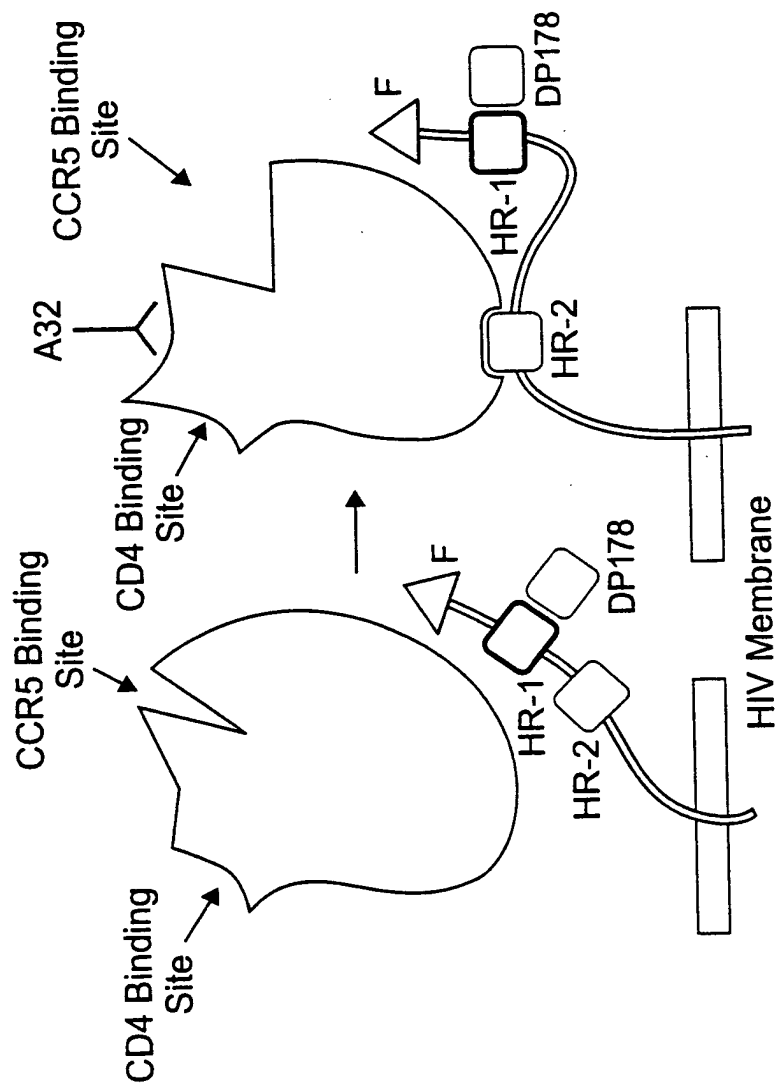


FIGURE 25

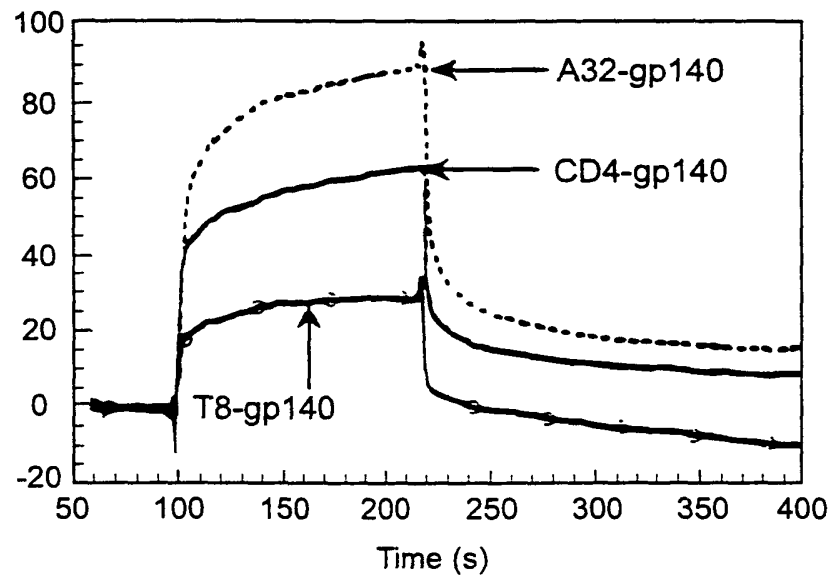


FIGURE 26